IV. (U) BASIC RESEARCH:

- 1. Neurophysiological Correlates:
 - Determine potential magnetoencephalograph (MEG)
 visual response correlates:
 - Between talented people and a variety of external near-field stimuli conditions.
 - Between talented people and a variety of external far-field stimuli conditions.
 - Determine potential MEG non-visual correlates:
 - Between talented people and a variety of external near and far field stimuli conditions.
 - Initiate research to identify and locate brain areas where parapsychological data may originate:
 - Extend research to show how data is eventually processed into conscious awareness.

2. Psychophysical Correlates:

- Determine potential for psychophysical parameters:
 - Galvonic skin response (GSR).
 - Other central nervous system (CNS) parameters.
 - Role of distance and other variables.
 - Potential for counter-influence.
- 3. Physical/Psychophysical Model Exploration:
 - Role of target "state" (degree of energy, chaos, size, distance, shielding, target format, etc.).
 - Role of psychological factors (goal, empathy, target type, etc.).

- Role of other possible influencing parameters (i.e., no "sender" present, presence of "sender," and degree of linkage).
- Other candidate factors.

4. Altered State Investigations:

- Determine if various altered states can improve data reliability (eg., lucid states, deep relaxation conditions).
- Determine if various altered states correlate with cognitive style or with target type.

5. Potential Influences of External Fields:

- Determine if geomagnetic influence can affect results.
- Develop new experiments with adjustable external field conditions.

6. Develop a Comprehensive Target Pool:

- To help sort out possible target characteristic influences.
- To use as a possible screening device.
- For assessing application issues.

7. Initiate Evaluation of "Energetics":

- Identify possible "follow-on" with available select talent (when located).
- Visit people/areas to observe demonstration.
- Identify equipment monitoring needs.

V. (U) APPLIED RESEARCH:

- Neurophysiological Correlates:
 - Develop magnetoencephalograph (MEG) screening/selection techniques (visual, nonvisual).
 - Measure sufficient known talent.
 - Measure other select populations (e.g., creative, yogi, martial arts).
 - Measure general population.
 - Examine feasibility for refinement to permit talent sorting according to task type or need (e.g., visual vs. verbal style).
 - Perform follow-on talent validation experiment with new candidates to confirm MEG findings.
 - Use as a check for training/development status or progress.
 - Evaluate individual strategies.
 - Evaluate specified training programs.
 - Examine feasibility of transmitting information (i.e., via redundancy coding methods) for near-field and far-field conditions according to cognitive style.
 - Physiological Correlates:
 - Determine potential of information transmission via GSR or other CNS parameters.
 - Application-Oriented Issues:
 - Investigate neurophysiological/psychophysical measures useful for predicting data quality.
 - Determine if self reports, focused intent, or other factors can be found that help in predicting data quality.

- General screening investigations:
 - Develop new target pools that are comprehensive and can identify various talent and talent preferences.
 - Conduct in-depth study of people previously involved in this research to search for patterns in background, personality, or other factors.
 - Reassess/investigate psychological or psychophysical measures that show promise for screening:
 - Defense Mechanism Test (DMT).
 - Stanford Hypnotic Suggestibility
 Scale.
 - Subliminal Perception Responses.
- Application improvements (Intelligence Related):
 - Examine methods for improving information quality or reliability:
 - New internal strategies.
 - Task/response timing.
 - Specific goal setting.
 - Spatial/temporal issues on strategies for search improvement.
 - Determine if results from conventional altered state research have applicability to application quality/reliability improvement.
 - Conduct various experiments, review data bases, and apply various evaluation methods to determine application potential and to identify methods of improving data quality as appropriate.

Explore other applications:

- Communications potential:

- Use of redundancy coding (with conscious response).
- Incorporate with other basic/applied projects.
- Simulate "real" problems:
 - Hostages (lost people).
 - Underground or submarine environment.

Predictive:

- Identify approaches for follow-on.
- Involve other labs, other talent.
- Examine influences of event complexity, time-of-occurrences.
- Tie to psychological/cognitive style.

- Code breaking:

Perform preliminary investigations for follow-on.

Training Developments:

- Develop improved ways t measure or evaluate the role of training, the training method, practice, goal setting, session timing, or other factors.
- Review a wide variety of "training development" approaches to identify candidate avenues for new basic/applied research (e.g., potential use of subliminal perception training).
- Compile appropriate evaluation procedures and statistics:
 - Use of control groups.
 - Improved artificial intelligence methods.

- Bias detection methods.
- Other

VI. (U) OTHER ACTIVITIES:

SG1B



- 2. Develop "Multi-Disciplined: Research Plan:
 - To incorporate findings from FY91 work.
 - Develop new interlab/interdisciplinary links with:
 - Neuro-cognitive sciences.
 - Optical data processing/neuro network technology.
 - Altered state research:
 - Hypnogogic/Hypnopompic
 - Other
 - Advanced physical theories:
 - Recent viewpoints on gravitation.
 - Postulates involving scalar waves.
 - Other
 - 3. Activity Support:
 - Research Management.
 - Scientific Oversight Committee (SOC).
 - Human Use Review.
 - Computer Support.
 - Misc. (Admin., TDY).

VII. (U) SCHEDULE CONSIDERATIONS:

(U) The following pages contain table summaries of key activities identified in the previous sections. Estimated level-of-effort, as well as key milestones and other data, are included on the tables.

EXTERNAL SUPPORT - FY91

BASIC RESEARCH

- 1. Neurophysiological Correlates
 - Visual Response MEG
 - Non-Visual MEG
 - For Select and Control Groups
 - For Near and Far Field
- 2. Physiological Correlates
 - Candidate CNS
 - Near and Far Field

EXTERNAL SUPPORT - FY91

BASIC RESEARCH

AREA EST. EST. EST. OF EFFORT START COMP. INTERFACE

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- 3. Energetics Phenomenon
 - Initiate Review
 - Locate People
 - Develop In-Depth Plan
 - Identify Equipment
- 4. Physical/Psychophysical
 - Physical, Cognitive Constructs
 - Target State, Environment
 - Possible Variables
 - Comprehensive Target Pool
 - External Field Effects

EXTERNAL SUPPORT - FY91

BASIC RESEARCH

AREA OF EFFORT START COMP. INTERFACE

- 5. Altered State Investigations
 - Lucid States; Other Noise Reduction Conditions
 - Correlation to Cognitive
 Style
- 6. Review of Relevant Conventional Research
 - Neurosciences/Biophysical
 - Advanced Physics
 - Psychological Issues

EXTERNAL SUPPORT - FY91

APPLIED RESEARCH

- 1. Neurophysiological Correlates
 - Visual MEG
 - Non-visual MEG
 - Select, Control Groups
 - Information Transmission
- 2. Physiological Correlates
 - CNS Parameters
 - Screening/Selection
 - Information Transmission

EXTERNAL SUPPORT - FY91

APPLIED RESEARCH

- 3. Application Enhancement
 - Factors for Predicting/ Improving Data Quality
 - Pattern Analysis
 - Strategies, Training
 - Other
 - Use of Multiple Sources
 - Task/Person Matching
 - Calibration Target Pools
 - Talent Quantification
 - Insight from Talented People
 - Use of Selection Aids
 - Psychophysical Measures
 - Subliminal, Other Scales
 - MEG Findings

EXTERNAL SUPPORT - FY91

APPLIED RESEARCH

- 4. Explore Various Applications
 - Intelligence Needs
 - Communication Potential
 - Subconscious (MEG)
 - Conscious (RV, Other)
 - Coding Techniques
 - Predictive
 - Preliminary Investigations
 - Develop Follow-On Plan (FY92+)
 - Multi-Labs
 - Timing/Complexity
 - Cognitive Style
 - Code Breaking
 - Preliminary Investigations

EXTERNAL SUPPORT - FY91

APPLIED RESEARCH

AREA EST. EST. EST.
OF EFFORT START COMP. INTERFACE

- Training/Development Investigations
 - Review Worldwide Literature
 - Role of Training, Practice, Goal Setting, Other
- 6. Evaluation Procedures/Statistics
 Manual
 - Research Projects
 - Various Operational Activities

EXTERNAL SUPPORT - FY91

OTHER ACTIVITIES

AREA OF EFFORT START COMP. INTERFACE

SG1B



- Develop Comprehensive Multi-Disciplinary Plan (For FY92+)
 - Integrated, Multi-Lab
 - Neurosciences/Cognitive Sciences
 - Advanced Research (Physics, Biophysics)
 - Other

EXTERNAL SUPPORT - FY91

OTHER ACTIVITIES

- 3. Activity Support
 - Research Management
 - Scientific Oversight Committee (SOC)
 - Human Use Review
 - Computer Support
 - Travel
 - Administration